

REMARKS/ARGUMENTS

Claim 10 has been cancelled without prejudice.

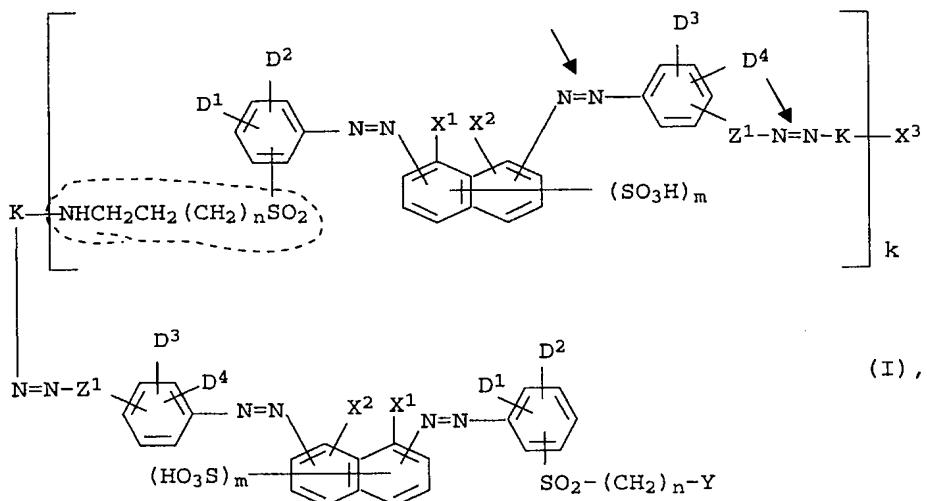
Claim 1 has been amended to correct a spelling error (see the definition for Tk<sup>1</sup> and Tk<sup>2</sup>) and to define "n" of the dyes of formulae II, X and XII as "n'" (added a prime). There is a variable "n" in formula A which can be "0 or 1" and "n" is also a subscript in formulae II, X and XII. Thus, to make these series independent, formulae II, X and XII have been amended so that subscript "n" is "n'". Support for newly added claim 31 can be found in original claim 1. Support for newly added claim 32 can be found in original claim 3. Support for newly added claim 33 can be found in the specification at page 12, line 20 to page 13, line 10. Support for newly added claim 34 can be found in the specification at page 8, line 9 to page 9, line 7.

No new matter has been added.

Related art rejections

1. The rejection of claims 1-2, 4-6, 24-26 and 30 under 35 U.S.C. § 103(a) as being unpatentable over DE 19825202 A1 ("Lamm") in view of US 2004/0025260 A1 ("Fennen") is respectfully traversed.

The Office considers that the dye of formula I of *Lamm* corresponds to the dye of formula III of the present claims (see pages 5-6 of the Office Action). However, this interpretation is incorrect. *Lamm*'s dye of formula I contains a linking -NHCH<sub>2</sub>CH<sub>2</sub>(CH<sub>2</sub>)<sub>n</sub>SO<sub>2</sub>- group (when k is at least 1) that is not found in the dye of formula III (or any of the other dyes) of the present claims. *Lamm*'s formula I is reproduced below with emphases added:



In addition, when  $k$  is (at least) 1, there would be an extra  $-N=N-$  group (see arrows) than that of formula III of the present claims. This is particularly relevant to claim 33, which further defines  $Dk^1$  and  $Dk^2$ .

When  $k$  (the subscript) is zero in formula I, then the square-bracket portion would be absent and this genus does not correspond to any of the formulae of at least claim 33.

The Office refers to *Lamm's* dye of formula I throughout the Office Action, but the compound(s) of formula IX is shown on page 6 of the Office Action. This compound does not correspond to the claimed dyes for the same reason given above. Moreover, there is no group in the formula IX corresponding to a group of formula A of the present claims.

Furthermore, neither of *Lamm* and *Fennen* contain any disclosure of a group corresponding to formula A of the present claims where  $n = 1$  (see claim 31).

Thus, *Lamm* does not disclose the dyes of the present claims having a group of formula A present thereon. This deficiency is not remedied by *Fennen*.

In regard to the pH of the floats of the present claims, the present specification states:

We have found that this object is achieved, surprisingly, on using dyes F, which have at least one functional group in the hereinbelow defined formula A, in an aqueous float at pH 7.5 or higher. In fact, dyeing and fixation proceeds so rapidly under

these conditions that a short dyeing time of 4 h or less is sufficient to achieve adequate color intensity and a high fixation of 85% or more.

and

An alkaline-detachable group Q is to be understood as meaning radicals which are detached under alkaline conditions, i.e., at pH 7.5 or higher, through elimination to form a vinyl sulfone group.

See page 3, lines 7-11 and page 4, lines 20-22 of the specification as filed, respectively.

The Office concedes that *Lamm* does not disclose pHs of dyeing floats (see the last sentence on page 6 of the Office Action). On the other hand, *Fennen* states:

After the reaction of the leather with the ammonia or primary amine and a polyfunctional organic compound, a dye comprising functional groups which are capable of reacting with the functional groups of the polyfunctional organic compound, forming a covalent bond, is added to the reaction mixture. ... In process step c) the pH of the aqueous alkaline medium is preferably 7 to 10, especially preferably 7.5 to 9, and in particular preferably 8 to 9. ... If the pH value falls too far as a result of the use of ammonia in process step a2) or b2), the alkaline range is expediently adjusted by adding inorganic bases.

See [0046] of *Fennen*, emphasis added. Here, pH is implicated in a reaction where a dye is covalently bound to functional groups of a polyfunctional organic acid (in particular, a reaction between an amino group of a dye and an aldehyde—see [0051] of *Fennen*). There is no mention that the pH conditions would result in a vinyl sulfone group, especially because *Fennen* contains no disclosure of, e.g., alkaline-detachable groups of groups corresponding to those of, e.g., at least claims 7 and 32.

There is no teaching in either of the cited references that the pHs of the presently claimed floats would be implicated in Q group elimination and accelerated fastening of dye to leather. It is therefore submitted that there is no motivation to combine the references and that the references were combined based on hindsight teaching using the present claims as a guide.

Moreover, *Fennen* teaches away from alkaline conditions during dyeing. *Fennen* states that "properties of leather tanned with metal salts undergo negative changes at pH values above 6-7." See [0002]. Further, *Fennen* states "leather tanned with metal salts shows insufficient stability" when made by "process[es] carried out at a pH value of 7-8 or more." See [0005]. The alkaline conditions referred to by the Office relate to the chemical reaction described above.

Withdrawal of the rejection is therefore requested.

2. The rejection of claims 9-12, 19-20 and 27-29 under 35 U.S.C. § 103(a) as being *Lamm* view of *Fennen* is respectfully traversed. These claims depend (ultimately) from claim 1 and therefore the same reasons given above apply equally to these claims.

Withdrawal of the rejection is therefore requested.

3. The rejection of claims 1-2, 4-6, 24-26 and 30 under 35 U.S.C. § 103(a) as being unpatentable over US 5,964,900 ("*Ruhlmann*") in view of *Fennen* is respectfully traversed for similar reasons given above. Additional reasons follow.

First, there is no dye in *Ruhlmann* that corresponds to those of claim 34. Here, a *prima facie* case of obviousness does not exist.

Secondly, the teaching regarding pH conditions in these cited references diverges: "The formulations are preferably adjusted to a pH from 3 to 8, more preferably from 3 to 7 and, most preferably, from 4 to 7" (column 4, lines 63-65 of *Ruhlmann*, emphasis added) and "In process step c) the pH of the aqueous alkaline medium is preferably 7 to 10, especially preferably 7.5 to 9, and in particular preferably 8 to 9" ([0046] of *Fennen*, emphasis added).

Thus, *Ruhlmann* leads to acidic conditions while *Fennen* leads to basic conditions.

The above notwithstanding, *Fennen* teaches implicates the alkaline conditions in the reaction between the dye and the polyfunctional organic compound (see above). Thus, the chemistry in *Fennen* at this point is unrelated to the dyeing of the present invention.

Withdrawal of the rejection is therefore requested.

Obviousness-type double patenting rejection

The provisional rejection of Claims 1-12 and 19-20 under the judicially created doctrine of obviousness-type double patenting over claims 16-30 of copending U.S. Application No. 11/628,659 (U.S. '659) is respectfully traversed. The above-identified claims of US '659 relate to processes of dyeing leather that are patentably distinct from the present invention as claimed. While Applicants traverse this rejection for the reasons noted, Applicants also request that the rejection be held in abeyance as per the guidance provided in the MPEP until definite claims are formed in this case, at which time the applicability of the Double patenting rejection can finally be assessed.

Moreover, Applicants note MPEP § 804(I)(B.)(1.), which states:

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer.

If "provisional" ODP rejections in two applications are the only rejections remaining in those applications, the examiner should withdraw the ODP rejection in the earlier filed application thereby permitting that application to issue without need of a terminal disclaimer.

Applicants note that U.S. '659 is the national stage application of international application PCT/EP05/006107, which was filed on June 7, 2005 and entered the national stage on December 6, 2006. In contrast, the present application has *an effective filing* date of October 28, 2004, which is the date on which the international application of the present application

was filed. Thus, the present application is earlier filed application, and the rejection under obviousness-type double patenting should ultimately be withdrawn upon satisfying the requirements described in the MPEP, quoted above.

Other matters

The rejection of claims 1 and 9-10 under 35 USC § 112, 2<sup>nd</sup> paragraph is, in part, respectfully traversed.

Claim 10 has been cancelled without prejudice.

The Office considers that the claims are "incomplete for omitting essential steps, such omission amounting to a gap between steps." See page 4 of the Office Action.

The leather dyeing processes of the present claims involve contacting leather with an aqueous float having the at least one dye F (or a metal complex thereof), where the "float exhibits a pH of from 8.5 to 11." The leather is dyed by this contacting. Thus, no essential steps are omitted.

Conclusion

Applicants respectfully submit that the above-identified application is in condition for allowance. Notification thereof is requested.

Respectfully submitted,

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